Perspective

New Jersey's BGS Auction:

A Model for the Nation

Internet procurement may be used in other states.

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ince 2002, the annual energy auctions created and administered by the New Jersey Board of Public Utilities (BPU) have proven to

be an innovative and successful way to meet our state's growing demand for electricity. We were the first state in the nation to procure most of its electric needs through an Internet-based auction. Our successful auction now serves as a template for other states, and is being considered for use by our neighbors in Pennsylvania, Delaware, and Illinois. Moreover, our auction is being lauded by economists and other industry professionals for its efficient allocation and explicit pricing of risk to market actors who wish to provide utility service.

The development of the New Jersey auction arose from our early experience with deregulation. In 1999, our state legislature passed the Electric Discount and Energy Competition Act, which assumed that residential and small-business consumers would jump at the opportunity to choose their electricity supplier. Many of these customers, however, found little incentive to incur the cost of becoming an educated energy consumer. Thus, most remained "rationally ignorant," preferring instead to have someone else choose their energy supplier for them. Even those few who were interested in shopping around

found little or no savings due to retail price caps that did not expire until the summer of 2003.

We thus were confronted with the quandary of how to harness the economic forces of competition for customers who have little incentive to shop around for their electricity. The BPU responded by creating the basic generation service (BGS) auction, which created a new market participant—the wholesale bidder—to purchase energy on behalf of residential and small commercial customers. The wholesale bidder bids to serve a fixed percentages of a utility's load (called a "tranche"). The utility then enters into rolling three-year contracts with the lowest-cost bidder. The staggering of the auctions helps mitigate the market-timing effects and price differences of any particular bidding period.

Because energy costs represent a substantial expense for large commercial and industrial (C&I) customers (more than 1,250 kW), they often are motivated to educate themselves regarding supply choices. Consequently, they either must shop for electricity themselves by signing bilateral contracts with competitive suppliers, or pay hourly spot prices in the PJM wholesale market. In fact, 64 percent of these customers—about 1,200 accounts—already have switched to competitively supplied electricity. This number is even higher from a load perspective—in

excess of 84 percent. This group has expanded slowly but steadily over the past two years.

At the BPU, we are cautiously aggressive when it comes to expanding the spectrum of hourly priced customers. While accurate price signals may provide significant economic benefits to individual customers and the system as a whole, we also must consider metering and billing costs, and overcome any significant educational hurdles that might stand in the way. Therefore, we will keep moving forward at a measured, prudent pace on hourly pricing.

Reflections on the BGS Auction

This past February we once again held two simultaneous, multiple-round auctions. One round was for fixed-price service to residential and small- and medium-sized commercial customers. The other was for hourly priced service—for the capacity and ancillary needs of our state's larger electric customers. The value of this year's contracts was \$4.6 billion overall, of which \$3.6 billion was for fixed-price customers. These results were averaged with the two-thirds of electric supply already under contract from previous auctions to determine customer rates.

For the fourth consecutive year, our BGS auction succeeded in shielding New Jersey ratepayers from the large increases in natural-gas wholesale prices. While the price of natural gas has risen more than 300 percent over the past five years and by 41 percent over the past two years alone, the average New Jersey residential bill has increased a mere 2.67 percent over that same two-year period.

The concept of a BGS auction required a leap of faith for the BPU commissioners when it was developed during 2001-2002. Going from an integrated, fully regulated, >>>

rate-of-return market structure to the divestiture of generation, and then to a descending-clock auction for energy procurement required hard work and hands-on learning. The adventure has been well worth it. Our journey has led us to the conclusion that the descending-clock auction process as administered by the BPU provides certain inherent benefits. Among its myriad positive attributes is the simple fact that the process is fair, and that all participants perceive it as such.

When we first began investigating the descending-clock auction process, everyone at the BPU had a mental concept of what constitutes an auction. Whether they pictured Christie's or an estate sale on a large lawn, each image included a barker at a podium trying to extract the highest price from the audience. Our BGS auction is just like that—except that it's conducted over the Internet, and it attempts to extract the lowest price.

Experts Everywhere?

As we began to interview consultants and reviewed what was happening in other states, we expected to find "auction expertise" everywhere. But the universe of individuals who can design and run a New Jersey-style, descendingclock, Internet-based auction actually is quite small. Nevertheless, we did our due diligence and have been pleased with the results. In making our initial choices, we were looking for firms not solely focused on the theoretical, but rather with hands-on experience in applying the auction theory to new situations to adapt the descending-clock auction process to our wholesale and retail electricity markets.

While we approve the auction process and rules four months prior to the actual event, daily decisions must be made regarding creditworthiness, bidder

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eligibility, and starting prices-not to mention those round-by-round decisions made during the auction itself. We quickly realized that the regulatory regimen would not permit the commissioners to make these decisions and still have an efficient process, so we authorized BPU staff and consultants to make these decisions. Over the last four auctions we have not received a single complaint from bidders, nor have we had one single challenge to its outcome. The reason is simple: The rules and requirements are known well in advance and uniformly applied—from the credit requirements and the contracts to the manner in which questions are answered and concerns addressed. Of paramount importance is the transparent manner in which winning bidders are chosen. Anyone able to match the closing price is a winner. There are no after-the-fact discussions with bidders, and there is no need to interpret prices.

As the oldest and largest wholesale market in North America, PJM provides us with a competitive wholesale market upon which to draw. In 2005,

with 25 different bidders participating, 12 entities won the right to serve load in one or both auctions. Of those, four were not winners in 2004, while one had never won before. Nevertheless, the auction itself is not designed to determine the competitiveness of the wholesale market. Rather, it is up to the BPU to determine whether market conditions are right for the auction process. Of course, we have rules and safeguards to protect against collusion and gaming. We also have a limit on the amount of load for which a bidder is eligible. These load caps, however, exist as much to limit the utility's exposure to default as they do to address market share. In the end, the BGS auction process works within the existing market structure.

The few months ramping up to the BGS auction are quite hectic-with applications to evaluate, protocols to finalize, systems to test and retest, and starting prices to determine. Since it instills confidence in participants to not only have a well-delineated schedule but also to feel that the managers will adhere to it, it is critically important that the consulting firms be available on short notice with qualified experts on hand to discuss and resolve issues as they arise. In this regard, we interviewed a number of firms that had a lead person with substantial credentials, but whose supporting cast resembled a group of graduate students looking for "on-the-job training." We decidedand rightly so-that we wanted, and would pay for, firms whose expertise did not depend on the availability of any single person, no matter what the qualifications. With an auction in which contracts have been valued at about \$5 billion each year, we could ill afford for the credibility and viability of the process to be subject to the health, moods, or conflicting schedules of any one person.

Auction Advantage

We are extremely proud that New Jersey's auctions, through their well-designed planning and sheer size, have been consistently successful in securing the most competitive prices for electric utility supply customers. Through their fair and transparent design, each annual event has attracted a wide array of bidders.

We have tried to reduce risk by adding regulatory certainty to the process. For example, we finalize the results within two days of the auction's conclusion. Knowing that the BPU is aware of the risks and responsive to the regulatory concerns of the bidder has helped attract more interest in our auction. We witnessed a greater mix of participants, including generators, marketers, and financial houses. This created a more competitive process, which, coupled with the large-scale size of the contracts, helped mitigate increases in electric rates. Other contributing factors include the staggering of supply periods and the blending of prices for each period to smooth out differences between overlapping market terms.

As pleased as we have been with our process, there is no escaping that we are just squeezing the best price out of an industry, and world, over which we have limited control. For example, a hurricane in the Gulf of Mexico or a transformer explosion at the wrong substation can offset months of planning and hard work. Moreover, during the past four years our closing auction prices have increased due to the inescapable rise in natural gas prices. However, when we consider them in the context of volatile fuel markets, as well as a changing PJM structure and an uncertain world, our auctions have kept price rises to a minimum.

Our confidence is bolstered by the kind words we have received from most segments of the industry—regulators, utilities, and suppliers—through every step of the process, but we are not resting on our laurels. We are constantly re-assessing, tweaking, and improving to make New Jersey's BGS the best it can possibly be. While we already have approved the auction format for 2006, we will continue to review the details

of the BGS process and build on our experiences in the years to come.

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